

This listing of claims replaces all previous listings:

**Listing of Claims**

Claims 1 - 7. (Canceled)

8. (Withdrawn) The vector according to Claim 1, wherein the exogenous gene is an exogenous *MinD* gene.

9. (Withdrawn) The vector according to Claim 8, wherein said exogenous gene is derived from *Arabidopsis thaliana MinE* gene

Claims 10 -14. (Canceled)

15. (Withdrawn) The transgenic plant according to Claim 10, wherein said exogenous gene is an exogenous *MinE* gene.

16. (Withdrawn) The transgenic plant according to Claim 15, wherein said exogenous *MinE* gene is derived from *Arabidopsis thaliana MinE* gene.

17. (Withdrawn) A method of transforming the chloroplast genome of a plant, said method comprising the steps of:

- A) producing a nuclear transgenic plants which contains large chloroplasts by:
  - i) providing a vector comprising an exogenous gene which encodes a protein which has the same functional activity as a protein encoded by the *Arabidopsis thaliana MinE* or *MinD* gene and which when expressed in a plant cell causes the plant cell to have enlarged and/or a reduced number of chloroplasts; and, ii) transforming the nuclear genome of a plant with said vector which comprises said exogenous gene; and,
- B) transforming the chloroplast genome of said nuclear transgenic plant with a vector which comprises Gene of interest.

18. (Withdrawn) The method of Claim 17, wherein said exogenous gene is derived from *Arabidopsis thaliana*.

19. (Withdrawn) The method of Claim 17, wherein said exogenous gene is an exogenous *MinD* gene.
20. (Withdrawn) The method of Claim 19, wherein said exogenous *MinD* gene is derived from *Arabidopsis thaliana MinD* gene.
21. (Withdrawn) The method of Claim 17, wherein said nuclear transgenic plant is a tobacco plant.
22. (Withdrawn) A chloroplast transgenic plant produced by the method of Claim 17.
23. (Withdrawn) The method of Claim 17, wherein said exogenous gene is an exogenous *MinE* gene.
24. (Withdrawn) The method of Claim 23, wherein said exogenous *MinE* gene is derived from *Arabidopsis thaliana MinE* gene.
25. (Withdrawn) A method of selecting for plants that are chloroplast transgenics but not nuclear transgenics, wherein said method comprises:
  - A) crossing a plant produced by the method of Claim 22 with a wild-type plant; and,
  - B) segregating out the plants which express the exogenous gene or genes of interest in the chloroplast genome and further do not express the exogenous gene in the nuclear genome by identifying which plants have normal chloroplast size anti number and have the desired characteristic produced by the exogenous gene expressed in the chloroplast genome.
26. (Withdrawn) The method of Claim 25, wherein said exogenous gene is derived from *Arabidopsis thaliana*.
27. (Withdrawn) The method of Claim 25, wherein said plant which is a chloroplast

transgenic is a tobacco plant.

Claims 28 - 31. (Canceled)

32. (Withdrawn) The vector according to Claim 28, wherein the exogenous gene is an exogenous *MinE* gene.

33. (Withdrawn) The vector according to Claim 32, wherein said exogenous *MinE* gene is derived from *Arabidopsis thaliana MinE* gene.

34. (Canceled)

35. (New) An isolated transgenic tobacco plant cell comprising within its nuclear genome:  
a) an exogenous nucleic acid sequence operably associated with a promoter suitable for expression in tobacco cells, wherein said exogenous nucleic acid sequence encodes an *Arabidopsis thaliana* MinD polypeptide; or  
b) an exogenous nucleic acid sequence operably associated with a promoter suitable for expression in tobacco cells, wherein said exogenous nucleic acid sequence encodes an *Arabidopsis thaliana* MinE polypeptide,  
wherein the tobacco plant cell comprises only one or a few large chloroplasts.

36. (New) A tissue culture comprising the cell of Claim 35.

37. (New) A seed comprising the cell of Claim 35.

38. (New) The cell according to Claim 35, wherein said exogenous nucleic acid sequence encoding an *Arabidopsis thaliana* MinD polypeptide comprises SEQ ID NO:1

39. (New) A method of producing a transgenic tobacco plant, said method comprising:  
a) transforming the nuclear genome of a tobacco plant cell with:  
i) an exogenous nucleic acid sequence operably associated with a promoter suitable for expression in tobacco cells, wherein said exogenous nucleic acid sequence encodes

an *Arabidopsis thaliana* MinD polypeptide; or

ii) an exogenous nucleic acid sequence operably associated with a promoter suitable for expression in tobacco cells, wherein said exogenous nucleic acid sequence encodes an *Arabidopsis thaliana* MinE polypeptide, and

b) culturing said cell under conditions suitable for generating a transgenic tobacco plant comprising a plurality of cells that include only one or a few large chloroplasts.

40. (New) The method according to Claim 39, wherein said exogenous nucleic acid sequence encoding an *Arabidopsis thaliana* MinD polypeptide comprises SEQ ID NO:1.